

Title (en)

WATER ELECTROLYSIS DEVICE

Title (de)

WASSERELEKTROLYSEVORRICHTUNG

Title (fr)

DISPOSITIF D'ÉLECTROLYSE DE L'EAU

Publication

EP 3447168 B1 20201223 (EN)

Application

EP 18189116 A 20180815

Priority

CN 201710739861 A 20170825

Abstract (en)

[origin: EP3447168A2] A water electrolysis device comprises an ion exchange membrane electrolytic cell. The ion exchange membrane electrolytic cell includes an ion exchange membrane, a cathode chamber, an anode chamber, a hydrogen output tube, and an oxygen output tube. An anode is configured in the anode chamber, and a cathode is configured in the cathode chamber. The ion exchange membrane is configured between the anode chamber and the cathode chamber. The hydrogen output tube is coupled to the cathode chamber, and the oxygen output tube is coupled to the anode chamber. When water is electrolyzed by the ion exchange membrane electrolytic cell, oxygen is generated by the anode and then exported through the oxygen output tube, and hydrogen is generated by the cathode and then exported through the hydrogen output tube. The hydrogen and the oxygen are exported from the same side of the ion exchange membrane electrolytic cell.

IPC 8 full level

C25B 9/17 (2021.01); **A61M 16/10** (2006.01); **C25B 9/19** (2021.01); **C25B 9/23** (2021.01); **C25B 15/08** (2006.01); **G01N 33/18** (2006.01)

CPC (source: BR CN EP KR RU US)

A61M 11/005 (2013.01 - KR); **A61M 15/00** (2013.01 - KR); **A61M 16/10** (2013.01 - BR); **A61M 16/101** (2014.02 - EP US);
A61M 16/12 (2013.01 - KR); **C25B 1/04** (2013.01 - BR CN EP KR RU US); **C25B 9/19** (2021.01 - BR CN KR);
C25B 9/23 (2021.01 - EP KR RU US); **C25B 9/73** (2021.01 - BR CN EP RU US); **C25B 11/04** (2013.01 - KR US);
C25B 15/02 (2013.01 - BR CN KR); **C25B 15/08** (2013.01 - EP KR US); **G01N 33/18** (2013.01 - EP US); **A61M 11/044** (2014.02 - EP US);
A61M 16/162 (2013.01 - EP US); **A61M 2202/02** (2013.01 - EP US); **Y02E 60/36** (2013.01 - EP US)

Cited by

EP3594381A1; AU2019204698B2; US11414765B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3447168 A2 20190227; **EP 3447168 A3 20190612**; **EP 3447168 B1 20201223**; AU 2018217248 A1 20190314; AU 2018217248 B2 20191205;
AU 2020201565 A1 20200319; AU 2020201565 B2 20220113; BR 102018067358 A2 20190326; CA 3014948 A1 20190225;
CA 3014948 C 20200512; CN 108624903 A 20181009; CN 108624903 B 20210212; JP 2019049049 A 20190328; JP 6802224 B2 20201216;
KR 102283271 B1 20210730; KR 20190022408 A 20190306; PH 12018000230 A1 20190724; PH 12018000230 B1 20190724;
RU 2018130566 A 20200225; RU 2018130566 A3 20200225; RU 2730288 C2 20200821; SG 10201807058X A 20190328;
US 11105003 B2 20210831; US 2019062933 A1 20190228

DOCDB simple family (application)

EP 18189116 A 20180815; AU 2018217248 A 20180814; AU 2020201565 A 20200303; BR 102018067358 A 20180831;
CA 3014948 A 20180821; CN 201710739861 A 20170825; JP 2018153155 A 20180816; KR 20180099269 A 20180824;
PH 12018000230 A 20180822; RU 2018130566 A 20180823; SG 10201807058X A 20180821; US 201816108769 A 20180822